Health Planning Council
Meeting 7

Advisory Committee
Meeting 4

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Department of Public Health
February 11, 2014

Agenda

- Approve Minutes from December Meeting
  - Advisory Committee
  - Health Planning Council/Advisory Committee Joint Meeting
- Reminder of Timeline
- Update on Progress & Findings
  - Service Maps/Inventory
  - Informational Survey
  - Definitions (Deliverable 2)
- Analytic Outline: Methods & proposed level of analysis
- Findings from Pilot Services – Proof of Concept
- Next Steps

Agenda

- **Approve Minutes from December Meeting**
  - **Advisory Committee**
  - **Health Planning Council/Advisory Committee Joint Meeting**

Agenda

- **Reminder of Timeline**

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2013 – 2014: Timeline

	Oct. 2013	Nov. 2013	Dec. 2013	Jan. 2014	Feb. 2014	Mar. 2014	Q2 2014	Q3 2014	Q4 2014
Council Meetings	Strategic Plan Presented	Check point	Check point	First deliverables reviewed	Check point	Second deliverables reviewed	Draft plan		
Advisory Committee Meetings		Strategic Plan Presented	Check point	First deliverables reviewed	Check point	Second deliverables reviewed	Draft plan		
Deliverable 1: Analytic Outline, Service Line Maps									
Deliverable 1 Complete				Deliverable 1 submitted					
Deliverable 2: Key Definitions									
Deliverable 2 Complete						Deliverable 2 submitted			
Deliverable 3: Level III Analysis									
Public Hearings on Deliverable 3							Public Hearings		
Deliverable 3 Complete									Deliverable 3 Complete

Agenda

- **Update on Progress & Findings**
  - Service Maps/Inventory
  - Informational Survey
  - Definitions (Deliverable 2)

Maps/Inventory

- A first step in the health resource plan is to document the “inventory” & location of services (later steps address “capacity”)

- Preliminary inventory & maps presented at last Council/Advisory Committee meeting
  - Updated for modest changes in definitions & inventory, reviewed by Council/Advisory Committee members for edits

- All expected maps have been completed
  - Made available on the web, with source data, on January 13

- Potential for additional maps/inventory in the future: LTSS, additional BSAS & DMH services

- Potential for more functionality on the maps in future

Informational Survey

- Distributed via email to over 1000 stakeholders on 1/24 with response due by 2/5
- Informational Survey content:

I. Background of the statute & introduction to Health Resource Planning

II. Brief overview of Behavioral Health services in MA & listing of services under consideration for planning

III. Four questions for response

Informational Survey

Four questions for response:

- How do you anticipate health resource planning for Behavioral Health to help you in your work? How do you expect to use the information resulting from the effort?

- Are there specific services within Mental Health & Substance Abuse that you would like to see studied, and were not already included in the list of services on page 6? Please describe with as much specificity as possible. Please indicate how they can be addressed through health resource planning.

- Given the importance of prevention and also "post-acute" services for mental health & substance abuse, what critical evidence-based services & programs are available, should be expanded, or need to be developed? Are there specific models you suggest we study?

- Obtaining capacity, workload/volume, and demand data for outpatient & community mental health & substance abuse services is a challenge. Do you have ideas for data sources or suggestions for collecting data now or in the future? Are there specific "data gaps" that you feel are important for future data collection?

Responses by Type

Organization Type	Number of Responses
Provider Organizations	18
Government Organizations	3
Other (Payers, Professional Organizations, Advocacy, etc.)	7

Informational Survey

Preliminary Results

- Overall response
  - Respondents complimentary of the Health Planning Council's choice to examine behavioral health
  - Respondents urge the Health Planning Council to review and integrate work completed by other task forces (ex. Behavioral Health Integration Task Force)

Preliminary Results

Question 1

How do you anticipate health resource planning for Behavioral Health to help you in your work? How do you expect to use the information resulting from the effort?

- Programmatic use:
  - Grant writing
  - Advocacy
  - New program design
  - Resource allocation
- Improve Collaboration:
  - With Primary Care (ex. Federally Qualified Health Centers)
  - With outreach to community resources
- Improve Capacity and Access
  - Resource allocation across the state to address gaps
  - Inform advocacy
  - Improve patient access to behavioral health services
  - Provide referrals, in particular, to services based in communities

Preliminary Results

Question 2

Are there specific services within Mental Health & Substance Abuse that you would like to see studied, and were not already included in the list of services on page 6? Please indicate how they can be addressed through health resource planning.

- Specific Services:
  - Intensive Case Management
  - Peer Supports
  - Detox (Substance Abuse Acute Treatment Services)
  - Prevention
  - Services delivered in homes
  - "(ICBAT) Intensive Community Based Acute Treatment" and PACT "Program of Assertive Community Treatment"

- Specific Conditions:
  - Autism, Pervasive Developmental Delay
  - Organic and Neurological effects
  - Chronic Conditions in Persons living with Behavioral Health Conditions
  -
- Populations:
  - Children; Adolescents; Transition Age Youth; Elders
  - By payer

Preliminary Results

Question 3

Given the importance of prevention and also "post-acute" services for mental health & substance abuse, what critical evidence-based services & programs are available, should be expanded, or need to be developed? Are there specific models you suggest we study?

- Responses grouped by:

- Services for specific Populations
  - Increase Programs for Specific Cultural and Linguistic Groups
  - Early Childhood
  - Women with Substance Abuse Conditions
  - School-Age, School based Prevention
  - Persons Dually Diagnosed with Mental Health and Substance Abuse Condition

- Services:
  - Trauma Informed Care
  - Children's ABA services
  - PCMH with Behavioral Health
  - Community Support Services
  - Transitional Support Services
  - Care Transitions
  - Transportation
  - Continuing Care
  - Mental Health First Aid, SBIRT (Screening, Brief Intervention and Referral to Treatment, Telemedicine)

Summary of Responses

Question 4

Obtaining capacity, workload/volume, and demand data for outpatient & community mental health & substance abuse services is a challenge. Do you have ideas for data sources or suggestions for collecting data now or in the future? Are there specific "data gaps" that you feel are important for future data collection?

- Data Gaps:
  - Remove challenges to data access in regulation and practice
  - Supply data at regional, area and local level

- Data Sources:
  - Population-level surveillance (ex. BRFSS, National Surveys, youth prevention survey that provides data at a local level)
  - MBHP claims data
  - SIMS data
  - State Agency data
  - CHIA- All Payer Claims Data; SAMHSA “Behavioral Health Barometer”; and Health Policy Commission’s Provider Registration Program

- Suggestion:
  - Support an Integrated Mental Health-Substance Abuse Client Services Data System

Summary of Responses

Next steps

- Additional Council/Committee input welcome
- Staff are continuing to review responses and will continue to refine Analytic Outline in light of the input obtained
- Will post to the web

Definitions (Deliverable 2)

- "Definitions" are a critical component of quantitative-based health resource planning
  - Consistent definition of the service & inventory, volume, capacity, access
  - Definitions being built out as part of analytic outline

- Examples of inventory definitions (example only- not actual definition)
  - Inventory of residential services is measured in licensed beds
  - Inventory of outpatient mental health service is measured in providers: physicians, social workers, peer counselors, etc.

- Examples of volume definitions (example only- not actual definition)
  - Volume of day treatment is measured in hours of contact time
  - Volume of Medication Assisted Treatment Services is measured in Patient Doses and in 30 minute treatment visits (Units)

Developing definitions is recursive: start with a hypothesis, find out what can be measured, and then possibly change the definition to match what can be measured

Definitions (Deliverable 2)

"Definitions" are a critical component … continued

- Example of capacity definitions (example only- not actual definition)
  - The capacity of an inpatient bed is 85% average occupancy (or 75% or 80% or 90%...)
  - The capacity of a social worker is hours worked per year x 85% efficiency x 2 visits per hour

- Example of Access Measures (example only- not actual definition)
  - All Substance Abuse Residential Treatment sites should be within ¼ mile of a public transportation stop

As we developed the Analytic Outline (next section), we have made good progress toward developing definitions

Agenda

- **Analytic Outline**
  - Methods & proposed level of analysis

Analytic Outline: Current List of Services for Inclusion in the Resource Plan

Mental Health

- Acute Inpatient Psychiatric Units/Facilities (child/adult/geriatric)
- DMH Continuing Care Units/Facilities
- Licensed Outpatient Mental Health Clinics
- Outpatient Mental Health Services-General/Private Sector
- Diversionary Services:
  - Partial Hospitalization Programs
  - Day Treatment Programs
  - Emergency Service Programs
  - Crisis Stabilization Services
- Community Service Agencies
- DMH Site Offices- DMH Provided/Funded Community Support Services
- Clubhouse Services
- Recovery Learning Communities (RLCs)

Substance Abuse

- Acute Inpatient Substance Abuse Beds (adult/youth)
- Clinical Support Services (Clinically Managed Detox)
- Short and Long Term Residential Substance Abuse Beds (adult/family/youth)
- Outpatient Substance Abuse Counseling & Day Treatment
- Opiate Treatment Service Providers (OTP, OBOT)
- Outpatient Substance Abuse Counseling-General/Private Sector including OBOT
- Recovery Support Centers
- Community Support Programs and Services

Cross Sector

- Long Term Services & Supports (BH subset); Multiple Potential Programs—such as Adult Day Centers & Rest Homes
- School-based Services
- Preventative Services

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Analytic Outline: Prioritizing Level of Analysis, Understanding Sources of Data

Level of Analysis for Each of ~30 Services within Behavioral Health

Typical Topics for Analysis in Resource Planning

For All

Inventory

Service Definition

For Some

Capacity

Access Measures

Historical Volume

Future Demand

Gap

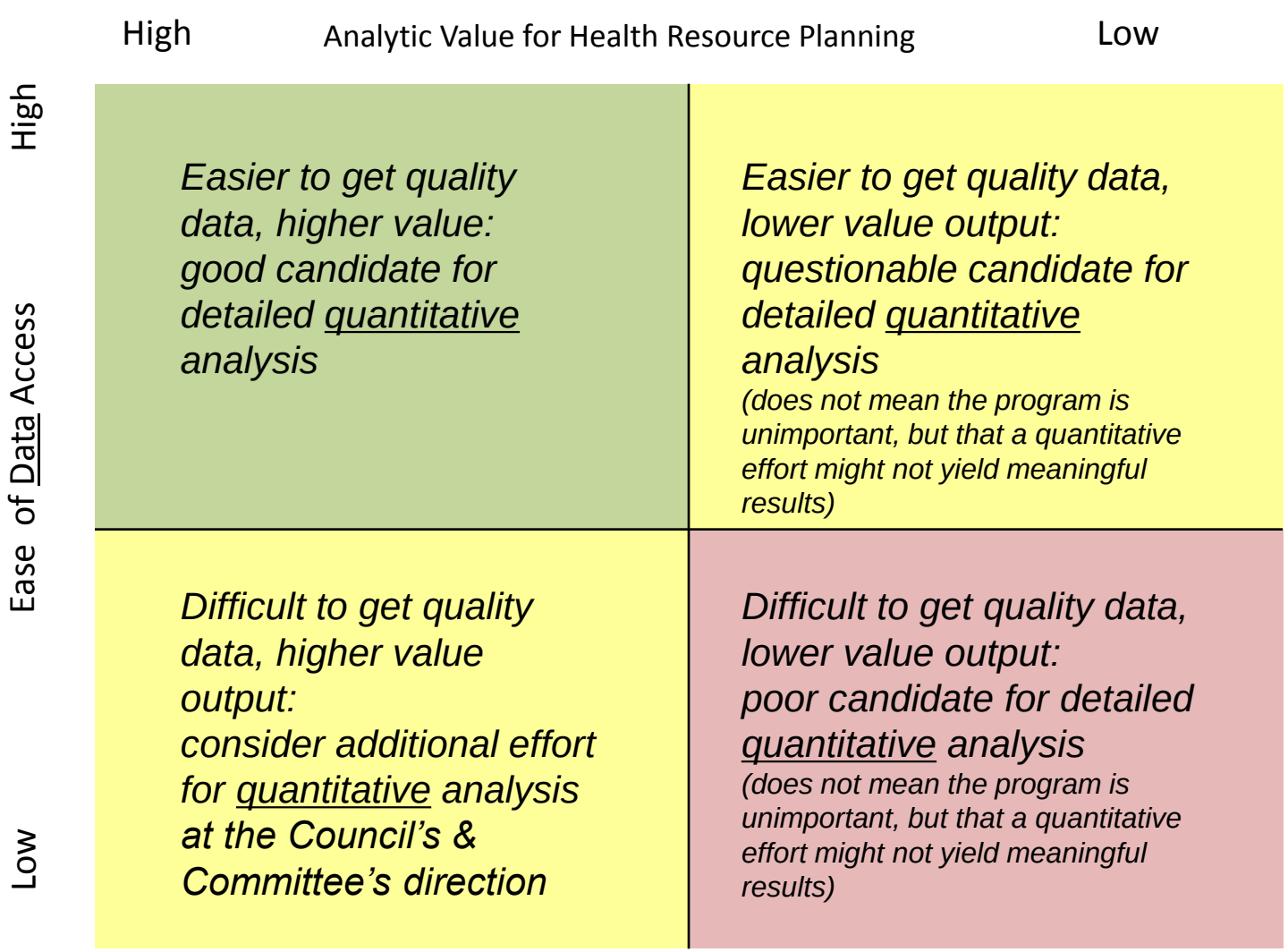
Narrative

Potential Levels of Analysis

- ✓ None/No Analysis
- ✓ Define Only
- ✓ General Forecast/Prevalence (for demand)
- ✓ Define & Analyze: State Level
- ✓ Define & Analyze: Site Level

For discussion: our baseline hypothesis is to NOT develop new reporting requirements this year but to have a potential for "primary source" data collection and/or APCD analysis for 1-2 services this year. This assumption underlies the "level of analysis" in the analytic outline

Analytic Outline: Simplify to Provide Direction to the Effort



"Difficult of data capture" is a blend of difficulty of capturing workload, access, and forecasting at a detail level
"Analytic Value" is a combination of the importance/interest/number of affected population and the "believability/robustness" of any data analysis that is likely to result.

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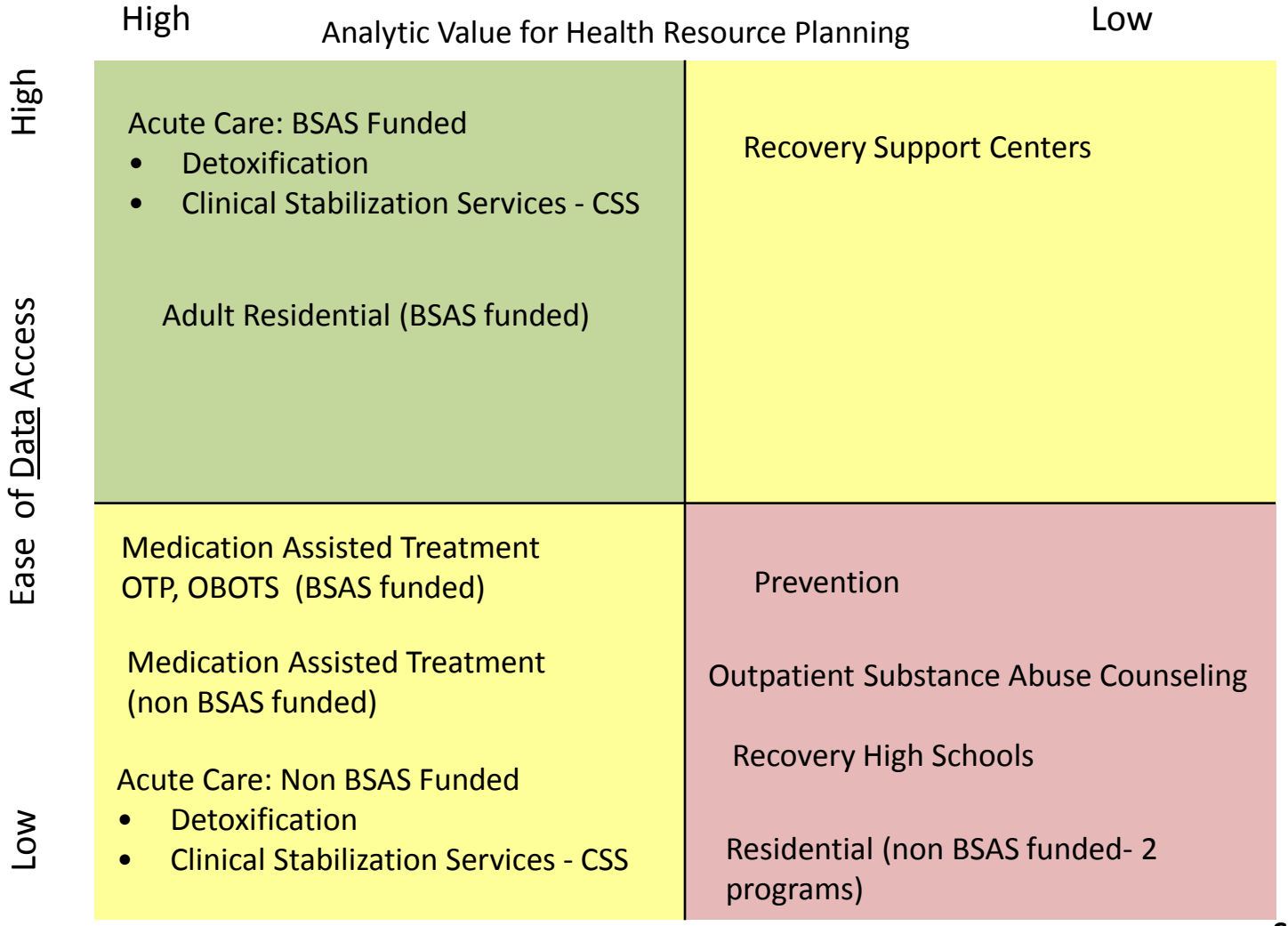
Analytic Outline: Hypothesis for Discussion

Substance Abuse



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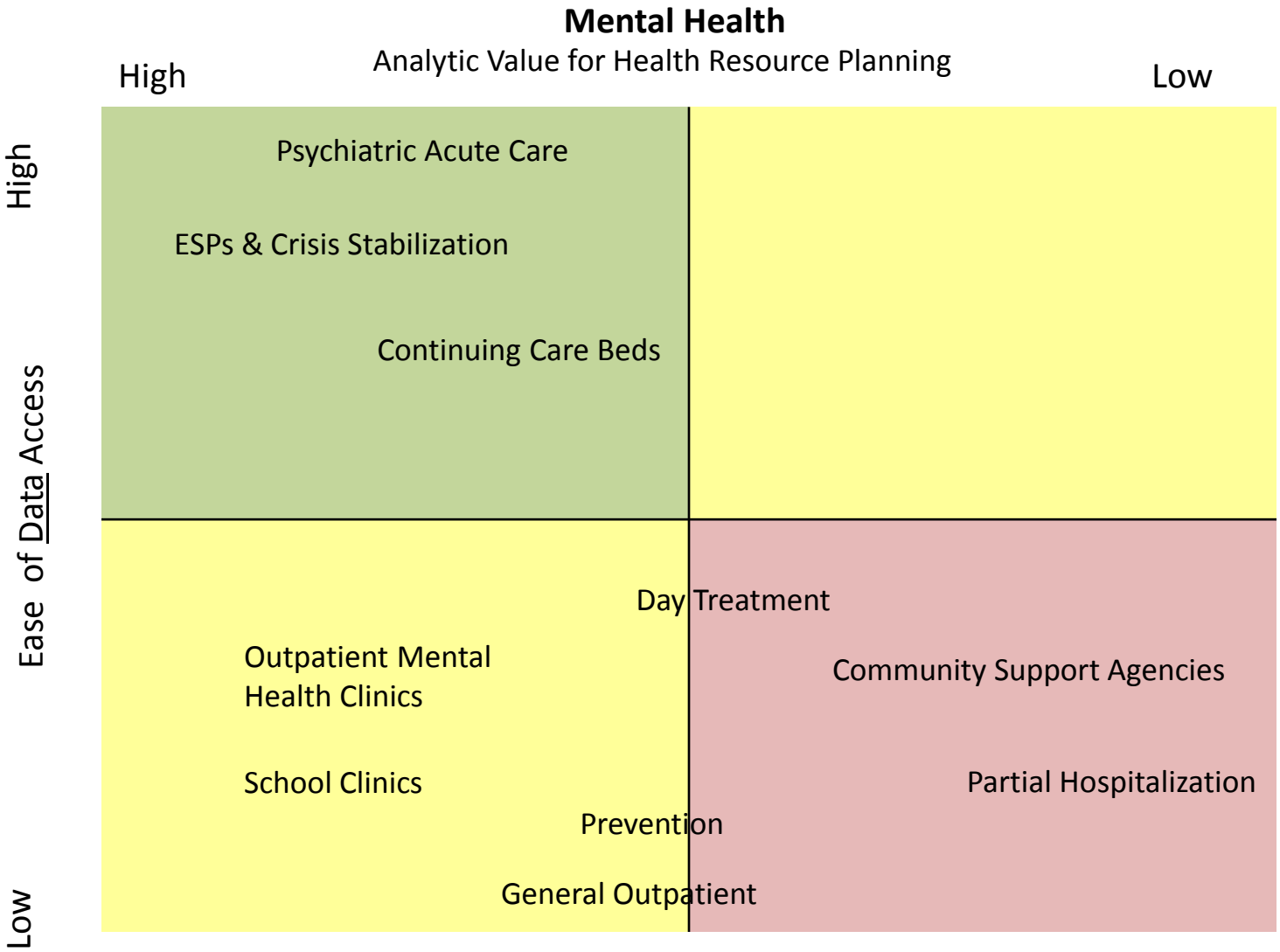

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Agenda

- **Findings from Pilot Services – Proof of Concept**

Findings from Pilots- Proof of Concept

Pilots- Proof of Concept Studies

- Inpatient/Acute Psychiatric Facilities
- Acute Treatment Services (“Inpatient Detox”)

- Start with the “green quadrant” and services for which data appeared to be more accessible
- Choose one from DMH and one from BSAS
- Use as proof of concept, identify challenges & solutions

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Findings from Pilots: Example Data Challenges & Solutions

Data Challenges

- Goal to measure public transport access to many services, but DPH's GIS system includes only MBTA routes
- Goal to measure use & need for child/youth/adolescent/adult/geri, but US Census & Donahue Center use 5 year age cohorts that do not align (10-14; 15-19; 20-25, etc.)
- Desire to use 2013 base year and 2018 forecast year, but US Census & Donahue Center use 5 year brackets that do not align (2010, 2015, 2020, etc.)
- Lack of "patient origin" data means we know the "destination of care" but not the origin of the demand. More complicated to obtain patient origin data
- Limited data for some types of facilities

Solutions

- Found GIS layers for all other Regional Transportation Authorities and added to the DPH GIS system
- Identified inter-year age interpolation solution
- Created method for inter-year forecast interpolation
- Revert to statewide estimates
- Discuss whether to use APCD for patient origin data
  - Ideally, resource planning is done based on the geographic origin of the demand
- Still a challenge to find source of SA Private Hospital data

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Findings from Pilots: Acute Care Mental Health

Name	City	DMH Area	Health Policy Commission Geographic Region	Child Beds	Child/ Adolescent Beds	Adolescent Beds	Geri Beds	Adult Beds	Total
Austen Riggs	Stockbridge	CentralWest	Berkshires					4	4
Berkshire Medical Center	Pittsfield	CentralWest	Berkshires					15	15
North Adams Regional Hospital closed1/13/14	North Adams	CentralWest	Berkshires						0
			Berkshires Total	**0**	**0**	**0**	**0**	**19**	**19**
Cape Cod Hospital	Hyannis	Southeast	Cape and Islands					20	20
			Cape and Islands Total	**0**	**0**	**0**	**0**	**20**	**20**
Clinton GMPU	Clinton	CentralWest	Central Massachusetts				20		20
Harrington Hospital	Southbridge	CentralWest	Central Massachusetts					14	14
Heywood Hospital	Gardner	CentralWest	Central Massachusetts				20	12	32
St. Vincent Hospital	Worcester	CentralWest	Central Massachusetts					13	13
UMass Memorial Medical Center	Worcester	CentralWest	Central Massachusetts					27	27
UMass Memorial Medical Center - PTRC	Worcester	CentralWest	Central Massachusetts					26	26
			Central Massachusetts Total	**0**	**0**	**0**	**40**	**92**	**132**
Baldpate	Georgetown	NorthEastSuburban	East Merrimack					57	57
Holy Family Hospital	Methuen	NorthEastSuburban	East Merrimack					47	47
Merrimack Valley Hospital	Haverhill	NorthEastSuburban	East Merrimack				17	10	27
Whittier Pavilion	Haverhill	NorthEastSuburban	East Merrimack				19	46	65
			East Merrimack Total		**0**	**0**	**36**	**160**	**196**
St. Anne's Hospital	Fall River	Southeast	Fall River				16		16
			Fall River Total		**0**	**0**	**16**	**0**	**16**
Bayridge	Lynn	NorthEastSuburban	Lower North Shore					62	62
Beverly Hospital	Beverly	NortheastSuburban	Lower North Shore					18	18
North Shore Medical Center, Salem Hospital	Salem	NorthEastSuburban	Lower North Shore					26	26
North Shore Medical Center, Union Hospital	Lynn	NortheastSuburban	Lower North Shore						
			Lower North Shore T	**0**	**18**	**0**	**20**	**106**	
Arbour Hospital	Jamaica Plain	Metro Boston	Metro Boston						
Arbour HRI	Brookline	Metro Boston	Metro Boston						
Beth Israel Deaconess Medical Center	Boston	Metro Boston	Metro Boston						
Bournewood	Brookline	Metro Boston	Metro Bost		12				
Cambridge Health Alliance @ Cambridge Hospital	Cambridge	Metro Boston	Metro Bos	13					
Cambridge Health Alliance @ Whidden Hospital	Everett	NortheastSuburban	Metro Bos						
Carney Hospital	Dorchester	Metro Boston	Metro						
Children's Hospital	Boston	Metro Boston	Metro		16				
Faulkner Hospital	Boston	Metro Boston	M						
Franciscan Hospital for Children	Brighton	Metro Boston		12					
Hallmark Health, Lawrence Memorial Hospital	Medford	NorthEastSuburban	tro Boston						
Hallmark Health, Melrose-Wakefield Hospital	Melrose	NortheastSubu	ston						
Massachusetts General Hospital	Boston	Metro Boston	Metro						

Illustrative only

		Data		
Type	HPC Region	Sum of FY11 Total	Sum of Sum FY12	Sum of Sum FY13
Adult	Berkshires			
	Cape and Islands			
	Central Massachusetts			
	East Merrimack			
	Lower North Shore			
	Metro Boston			
	Metro South			
	Metro West			
	New Bedford			
	Norwood / Attleboro			
	Pioneer Valley / Franklin			
	South Shore			
	Upper North Shore			
	West Merrimack / Middlesex			
Adult Total				
Child & Adolescent	Lower North Shore			
	Metro Boston			
	Metro West			
	Norwood / Attleboro			
	Pioneer Valley / Franklin			
	South Shore			
	Upper North Shore			
	West Merrimack / Middlesex			
Child & Adolescent Total				
Geriatric	Central Massachusetts			
	East Merrimack			
	Fall River			
	Lower North Shore			
	Metro Boston			
	Metro South			
	Norwood / Attleboro			
	Pioneer Valley / Franklin			
	South Shore			
Geriatric Total				
Grand Total				

Accomplishments

- Inventory & patient days aligned to level of care and Health Policy Commission Geographic Regions

- Data in pivot tables to allow for multiple analyses by geography, level of care, season, occupancy, etc.

Remaining Work & Challenges

- Complexity of overlapping use (e.g. is adult under age 65? Or do “geri patients” go to adult and geri units—depending on need/availability?)
- Lack of “patient origin” data
- Confirm bed capacity/occupancy definition for health planning purposes (75%, 80%, 85%, 90% etc.)
- Foundation for modeling of future forecasts: increased & decreased utilization (days per 1000)

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Findings from Pilot Chapters: Acute Care Mental Health

Projection of Adult (age 20+) Bed Need: By Health Policy Council Region

Pure Population Growth

Geography	A	B	C	D	E	F	G	H	I
	Adult FY 2013 Days of Care*	2013 Adult Pop	Days Per 1000 Population	Projected Adult 2018 Population	2018 Projected Days of Care (D/1000)*C)	Projected 2018 Adult Inpatient Census (D/365)	Projected Adult Bed Need (E/85%)	Total Adult Bed Inventory	Adult Surplus/ Deficit (H-G) (Deficits show - sign)
Berkshires Total								19	
Cape and Islands Total								20	
Central Massachusetts Total								92	
East Merrimack Total								160	
Fall River Total								0	
Lower North Shore Total								106	
Metro Boston Total								669	
Metro South Total								93	
Metro West Total								42	
New Bedford Total								30	
Norwood / Attleboro Total								67	
Pioneer Valley / Franklin Total								113	
South Shore Total								112	
Upper North Shore Total								20	
West Merrimack / Middlesex Total								62	
Statewide	0	5,023,659	0	5,180,799	-	0		1750	

*days of care at that occurred at hospitals in these regions, not necessarily days of care generated from citizens residing in these regions. Does not account for patient migration across regions.

Population from Donahue Center; age 20+.

Develop scenarios for greater or less utilization; apply Advisory Board Company forecasts

Agenda

- **Next Steps**

2013 – 2014: Deliverables

- **Deliverable 3: Level III Analysis**

Deliverable	Description	Date (2014)
Identification of key questions	• Prioritize areas for further analysis • Ascertain whether there are areas where additional targeted data collection is desirable/feasible	January
Estimation of Need	• By service/provider/bed type • Including projections of future need	January – March
Definitions	• Drafted and vetted with stakeholder participation • To include ideal occupancy rates and other standards	February – March ***Deliverable 2**
Inventory	• Start with services included in Deliverable 1 Maps, with potential for additional refinement	January - May
Analysis of Capacity	• Based on accepted industry standards, where possible • Standards vetted with experts and stakeholders, if needed	April - June
Issues Brief	• Identification of laws, policies, etc. known to affect system • Narrative description of expected effect	May - July
Public Hearings	• Goal to hold hearings in geographic areas of state identified as being over- or under-capacity in analysis	August – October
Final Report	• Completed and submitted to legislature	December ***Deliverable 3**

Immediate Next Steps

- **Service Maps & Inventory:**
  - Add maps for some LTSS, additional BSAS & DMH services
- **Analytic Outline**
  - Continue to enhance & develop
- **Definitions:**
  - Continue to develop definitions: using existing regulations/documents when possible, augment as needed
- **Capacity:**
  - Continue to analyze for those services that are more than "definition only"
- **Estimation of Need:**
  - Continue refinement of methodology
  - Apply method to "green quadrant" services
  - Determine which services should use APCD to assess historic volumes, patient origin
- **Next Meeting Date:** TBD